CLAIMS

1. (Currently amended) A sound reproduction system comprising a loudspeaker having at least two electroacoustic drivers mounted in the loudspeaker, said electroacoustic drivers in the loudspeaker providing non-parallel directivity to sound fields emanating from the at least two electroacoustic drivers, said electroacoustic drivers positioned in the loudspeaker whereby in plan view the sound field axes cross at a point to cause the sound fields to emanate substantially from said single point in plan view, each sound field having a maximum and a minimum amplitude less than 180° apart with an amplitude gradient there between that is substantially preserved over at least two full octaves, and each sound field being asymmetric about the axis of maximum amplitude of the sound field,

at least two channels from an electric signal source, each of said channels associated with the creation of each of said sound fields, said sound fields partially superimposed over an angle symmetrically located between the sound fields' maxima or minima, the amplitude gradient of each sound field versus angle being complementary to the amplitude gradient of the other sound field.

2. (Currently amended) A method of reproducing sound by creating at least two acoustic energy sound fields emanating in non-parallel directions substantially from a point in space in plan view, said sound fields each having at least one maximum and one minimum amplitude less than 180° apart with an amplitude gradient there between that is substantially preserved over at least two full octaves and each sound field being asymmetric about the axis of maximum amplitude of the sound field, whereby over an angle

symmetrically located between the sound fields' maxima or minima, the amplitude gradient of each sound field versus angle is complementary to the amplitude gradient of the other sound field and said sound fields are substantially mirror images of each other.

3. (Previously presented) The sound reproduction system of claim 1 wherein the maximum and minimum of each sound field are less than 90°apart.

4. (Previously presented) The method of claim 2 wherein the maximum and minimum of each sound field are less than 90° apart.

5. (Previously presented) The sound reproduction system of claim 1, including a plurality of said loudspeaker according to claim 1 at least partially surrounding a relatively large area of expected listener locations.

6. (Previously presented) The method of reproducing sound comprising creating a plurality of said mirror imaged sound fields according to claim 2 at least partially surrounding a relatively large area of expected listener locations.

7. (Previously presented) The sound reproduction system of claim 1 wherein the directions of the maxima and minima of the sound fields are retained over at least two octaves.

8. (Previously presented) The method of claim 2 wherein the directions of the maxima and minima of the sound fields are retained over at least two octaves.

9. (Previously presented) The sound reproduction system of claim 1 wherein the driver axes cross at a point and cause the sound fields to substantially emanate from said single point.

10. (Previously presented) The method of claim 2 wherein the sound fields are positioned with the symmetrically located angle between the corresponding minima less than the symmetrically located angle between the corresponding maxima.

11. (Cancelled)

12. (Previously presented) The sound reproduction system of claim 1 wherein the asymmetry of at least one sound field is caused by modifying the associated channel signal directed to a driver having an axis non-coincident with the axis of maximum amplitude of the sound field.

13. (Previously presented) The sound reproduction system of claim 12 wherein both the sound fields are produced by the same two drivers to produce the mirror imaged sound fields.

14. (Previously presented) The sound reproduction system of claim 12 wherein at least one of the drivers is used to produce both sound fields.

15. (Previously presented) The sound reproduction system of claim 14 wherein one of the drivers is a center driver.

16. (Previously presented) The sound reproduction system of claim 12 wherein the modification of the associated channel signal is created by modifying a plurality of other channel signals.

17. (Previously presented) The sound reproduction system of claim 12 wherein the modification of the associated channel signal occurs prior to amplification of the associated channel signal.

18. (Previously presented) The sound reproduction system of claim 1 wherein at least one of the electroacoustic drivers is located above another electroacoustic driver in the loudspeaker.

19. (Previously presented) The sound reproduction system of claim 1 wherein a plurality of electroacoustic drivers are located above other electroacoustic drivers to create vertical electroacoustic driver arrays in the loudspeaker.

20. (Previously presented) The sound reproduction system of claim 1 wherein the preferred listener location lies within the angle symmetrically located between the sound fields maxima or minima.

21. (Previously presented) The sound reproduction system of claim 1 wherein the preferred listener location lies within an angle defined by the maximum and minimum of at least one of the sound fields.

22. (Currently amended) A sound reproduction system comprising at least one loudspeaker having at least two electroacoustic drivers mounted in the loudspeaker, at least two channels from an electric signal source, each of said channels associated with the creation of each of sound fields emanating from the at least two electroacoustic drivers, said sound fields each having at least one maximum and one minimum amplitude less than 180° apart with an amplitude gradient therebetween, each of said sound fields being asymmetric about the axis of maximum amplitude of the sound field, and said amplitude gradient between said maximum and said minimum being substantially preserved over at least two full octaves.

23. (Previously presented) The sound reproduction system of claim 22 wherein said sound fields emanate in non-parallel directions substantially from a point in space in plan view.

24. (Previously presented) The sound reproduction system of claim 22 wherein over an angle symmetrically located between the sound fields' maxima or minima, the amplitude gradient of each sound field versus angle is complementary to the amplitude gradient of the other sound field.

25. (Currently amended) A method of reproducing sound by creating at least one acoustic energy sound field emanating from at least one electroacoustic sound radiating system, said sound field having at least one maximum and at least one minimum amplitude less than 180° apart with an amplitude gradient therebetween, said sound field being asymmetric about the axis of maximum amplitude of the sound field, and said amplitude gradient between said maximum and said minimum being substantially preserved over at least two full octaves.

26. (Previously presented) The sound reproduction system of claim 1 wherein the at least two electroacoustic drivers are mounted in a single loudspeaker.

27. (Previously presented) The sound reproduction system of claim 1 wherein the directions of the maxima and minima of the sound fields are retained over at least two full octaves lying between 120 H_z and 4 kH_z.

28. (Previously presented) The method of claim 25 wherein the at least two full octaves lie between 120 H_z and 4 kH_z.

29. (Previously presented) The method of claim 25, including at least two acoustic energy asymmetric sound fields emanating from at least two sound radiating arrays located in a single loudspeaker, said sound fields effectively radiating from a point in plan view, said two sound fields being mirror imaged about a median plane therebetween and over an angular area less than 180°, said angular area being directed at expected listener positions.